

Pre-injector Upgrade Updates (22 Jun 2011 – 06 Jul 2011)

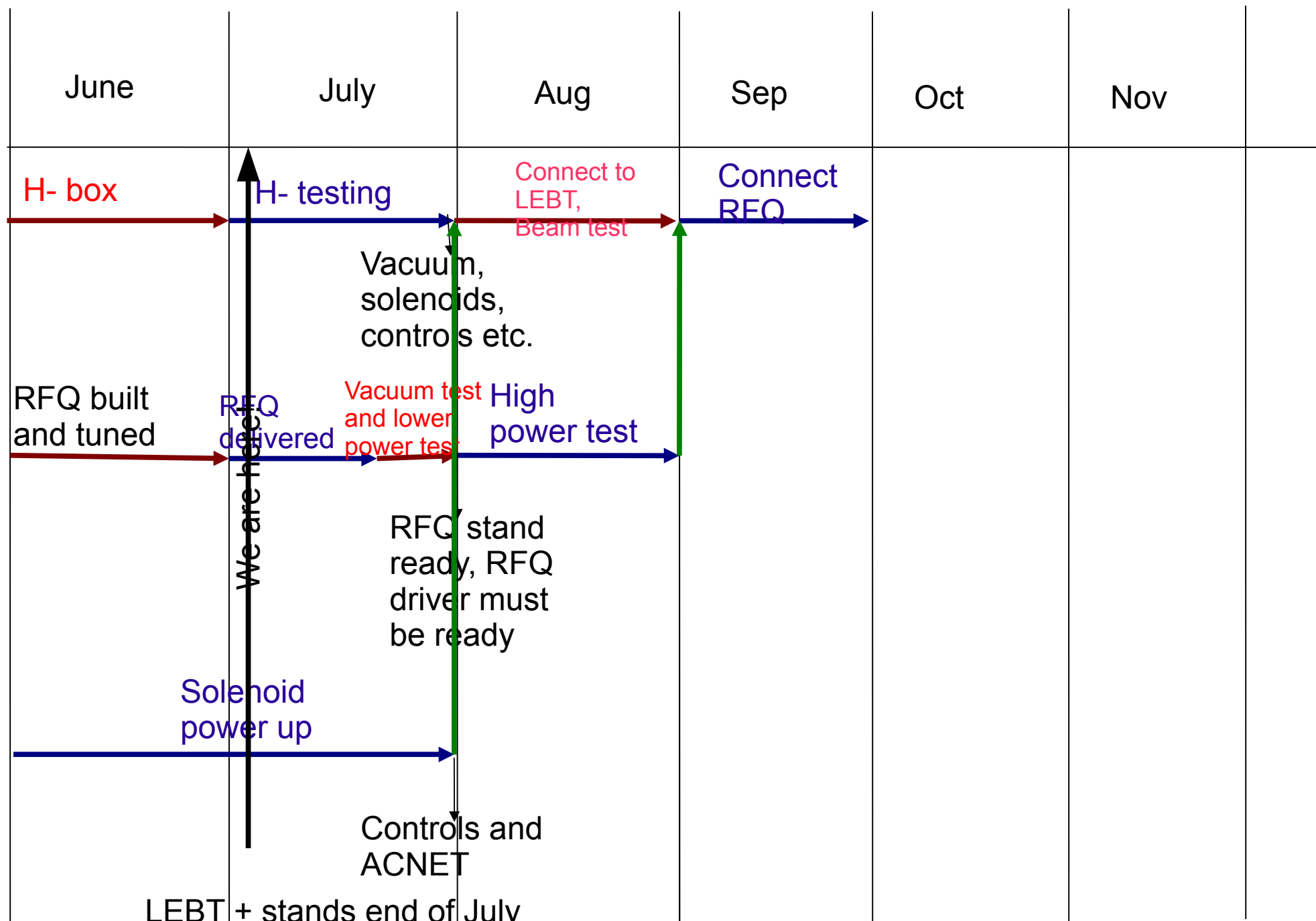
C.Y. Tan
06 Jul 2011

News

- Review for solenoid testing (29 Jun)
 - Add a smoke detector to each power supply space and not install Klixons on the cables.
 - finish the interlock switch installation.
 - Install 480vac labels on lexan panels and on the terminal block and fuse covers.
 - Do a thermal scan of the rack at full load current when the magnet is back. This will require that we turn the rack during the test.
 - Have a mini walk through after complete.

Reminders

- Fill in the MS Project time lines. See Elmie.
 - Mike Kucera
 - Vic Scarpine
- Fill in paper sections for the review.



Vacuum,
solenoids,
controls etc.

Vacuum test
and lower
power test

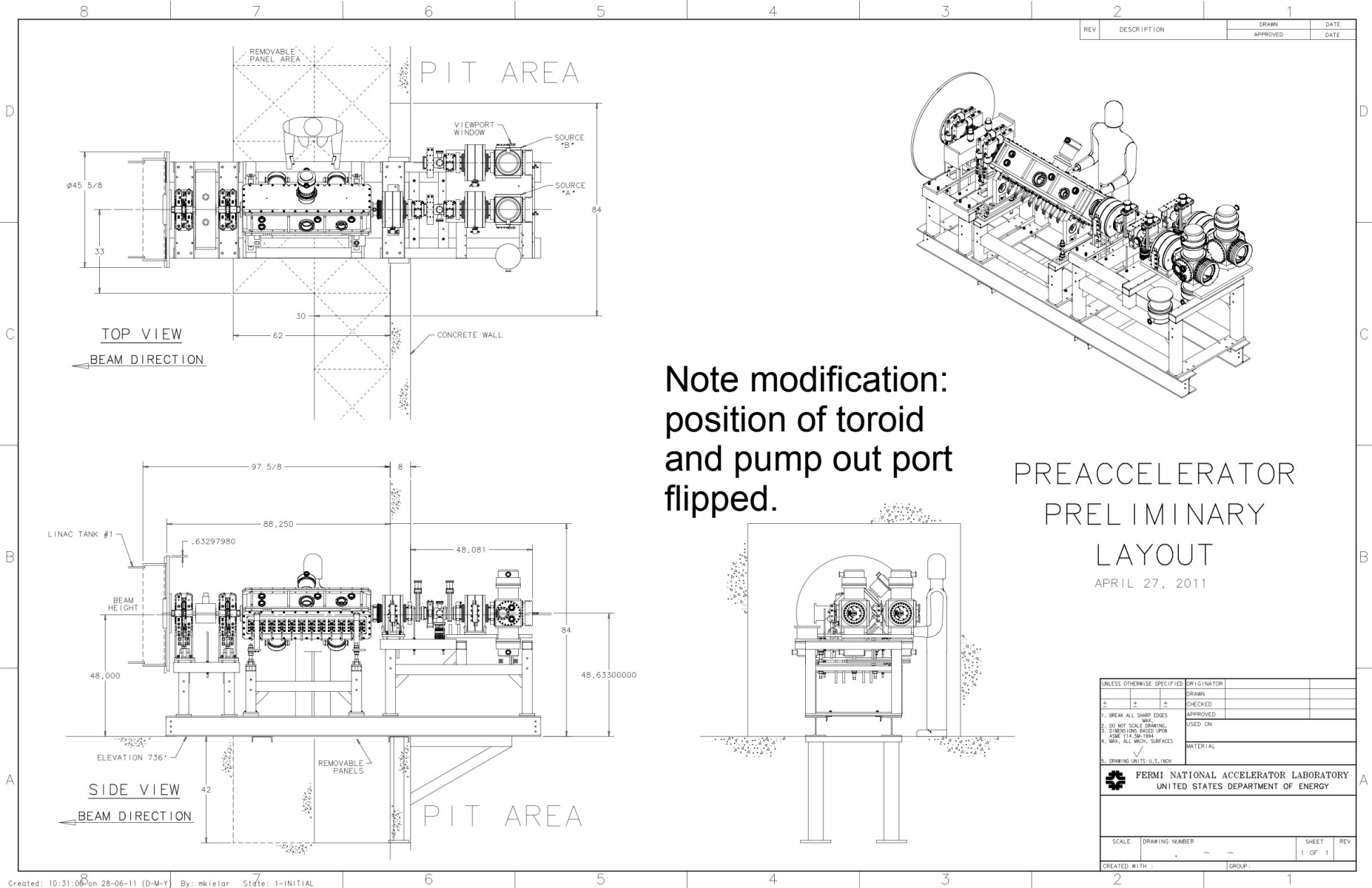
High
power test

RFQ stand
ready, RFQ
driver must
be ready

Solenoid
power up

Controls and
ACNET


LEBT + stands end of July
H- box end of June, (extractor PS
status?)



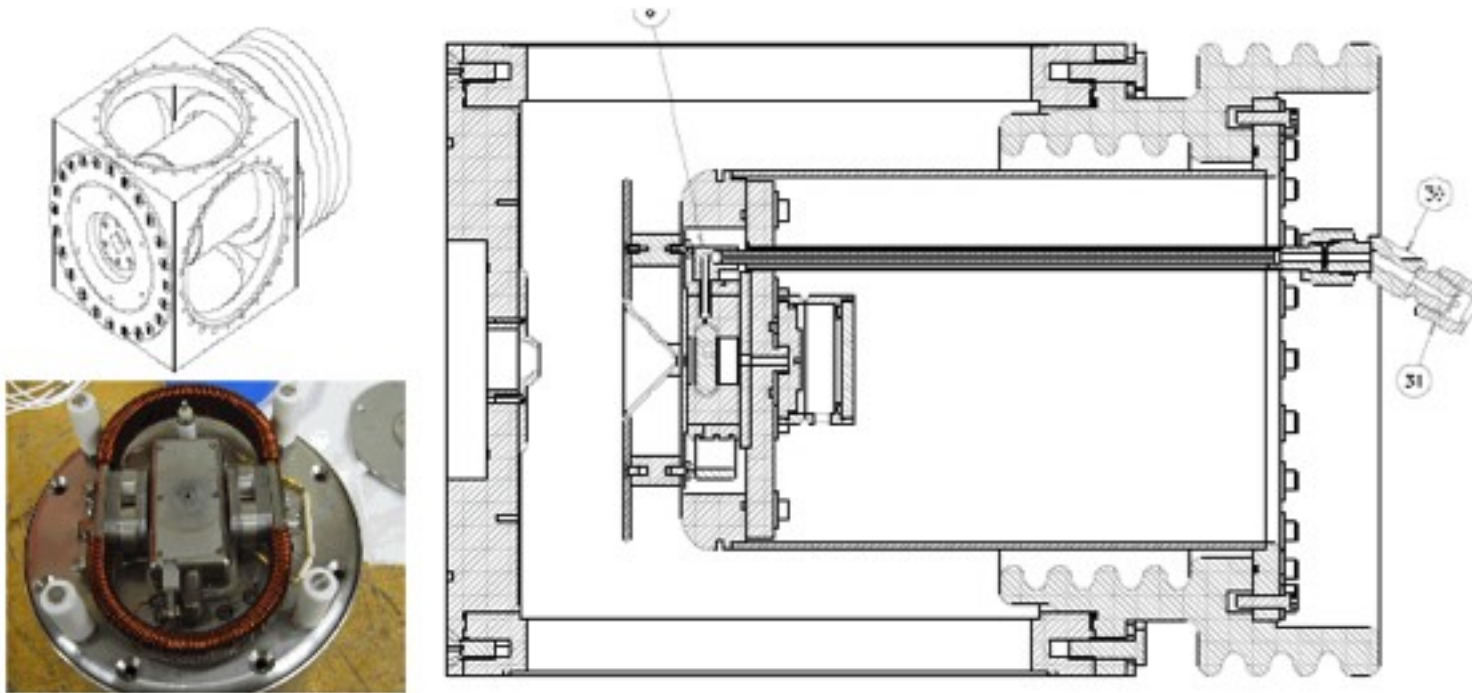
Note modification:
position of toroid
and pump out port
flipped.

PREACCELERATOR PRELIMINARY LAYOUT

APRIL 27, 2011

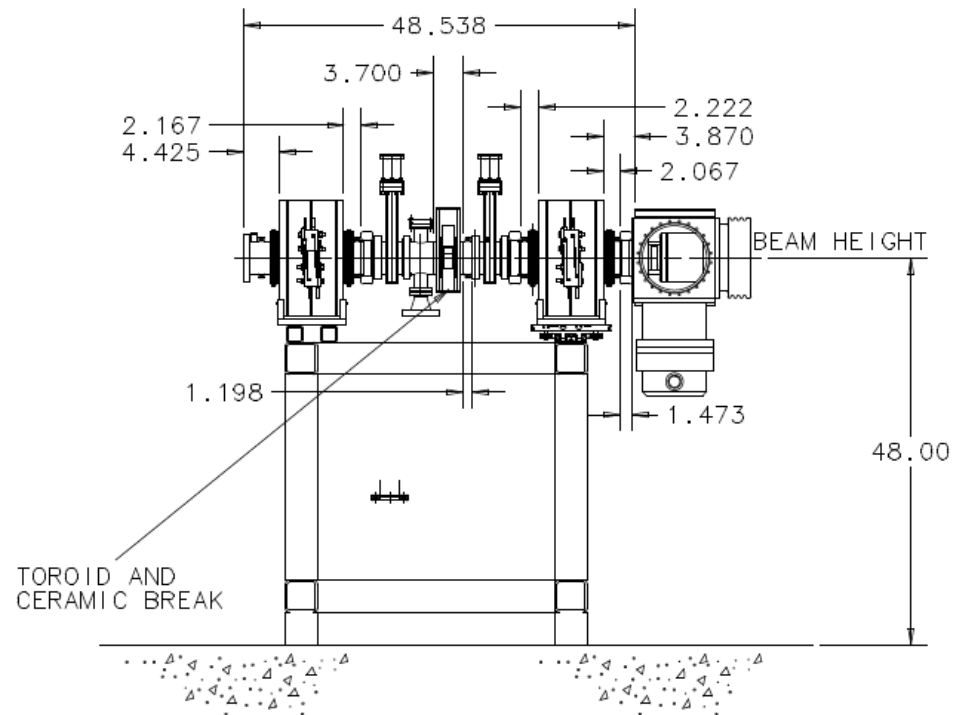
UNLESS OTHERWISE SPECIFIED			ORIGINATOR	
+	+	+	DRAWN	
+	+	+	CHECKED	
1. BREAK ALL SHARP EDGES			APPROVED	
2. DO NOT SCALE DRAWING			USED ON	
3. DIMENSIONS SHOWN IN INCHES			MATERIAL	
4. MAX. ALL MACH. SURFACES				
5. DRAWING UNITS: U.S. INCH				
 FERMIONATIONAL ACCELERATOR LABORATORY UNITED STATES DEPARTMENT OF ENERGY				
SCALE	DRAWING NUMBER		SHEET	REV
			1 OF 1	
CREATED WITH		GROUP		

Source Status



Device	Status	Comments
2 nd source cube	A few parts left to be machined	
Test stand source	Increased current by removing ground electrode	53 to 63mA with ground electrode removal. 95 mA by moving toroid closer to output. See next talk.
Extractor PS Source Turbos	Received transformer (16 Jun) received	All parts on hand

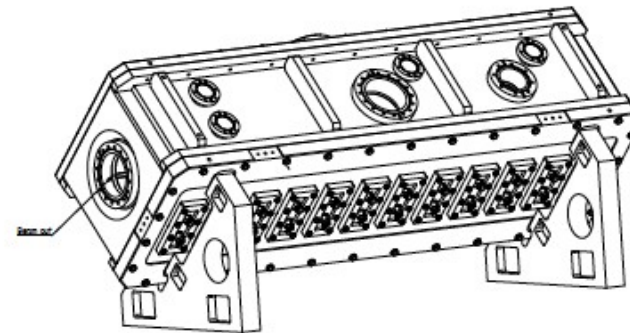
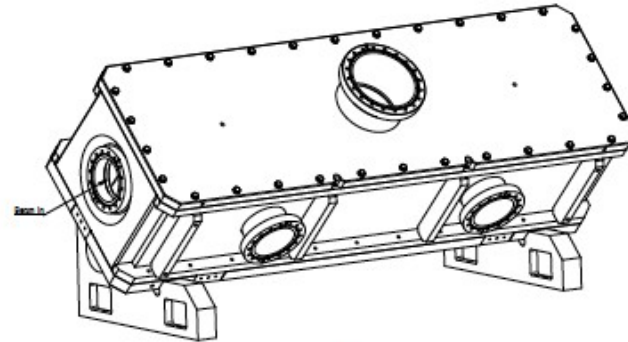
LEBT Status



Device	Status	Comments
Solenoid PS	Ready to test solenoids	Safety review is done (29 Jun)
Solenoids	Only #4 is incomplete.	Ready to be shipped.
LEBT drawings	Being drawn	Bellows ordered End of June to early July delivery. Final drawings still not here! Waiting for them to give
Correctors	final design (07 Mar 2011)	Steve Hays inductance estimates
Solid state switches	Have quote	\$75k for two. 90 days to deliver once purchase is made

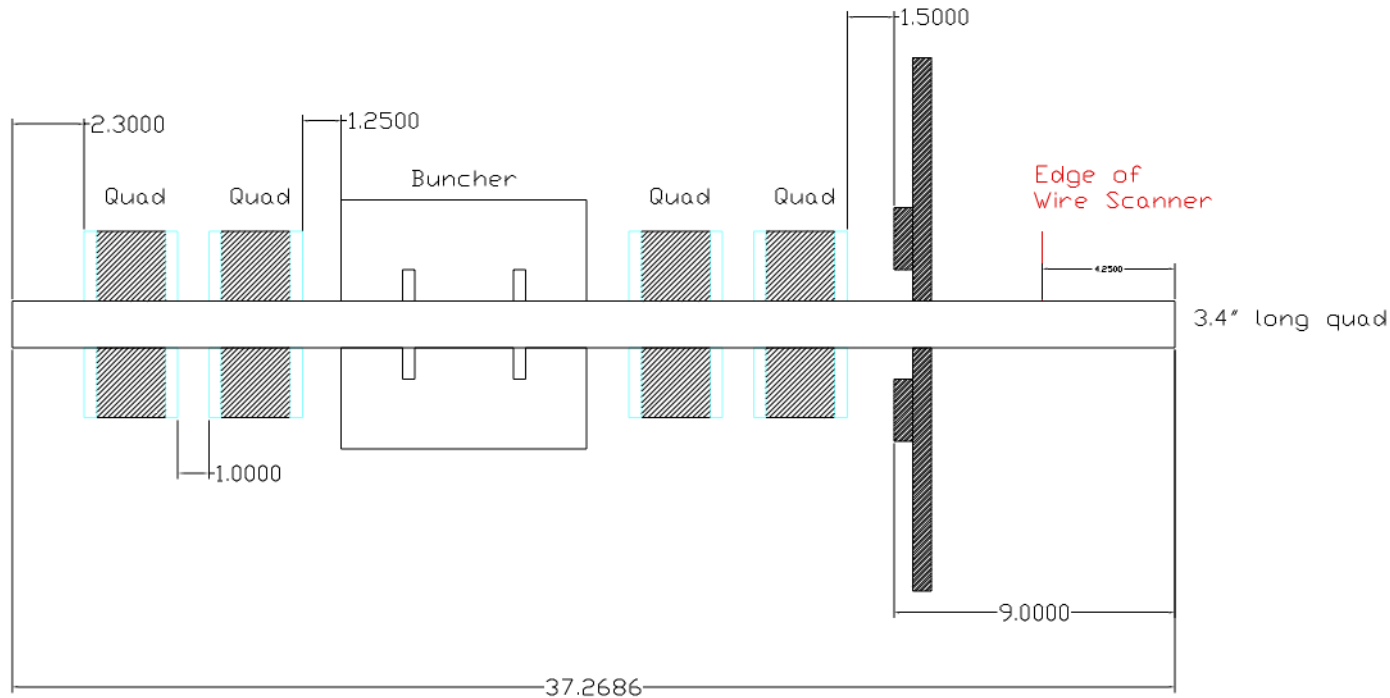
RFQ Status

- Should be done. Waiting for email from Schempp (06 Jul)



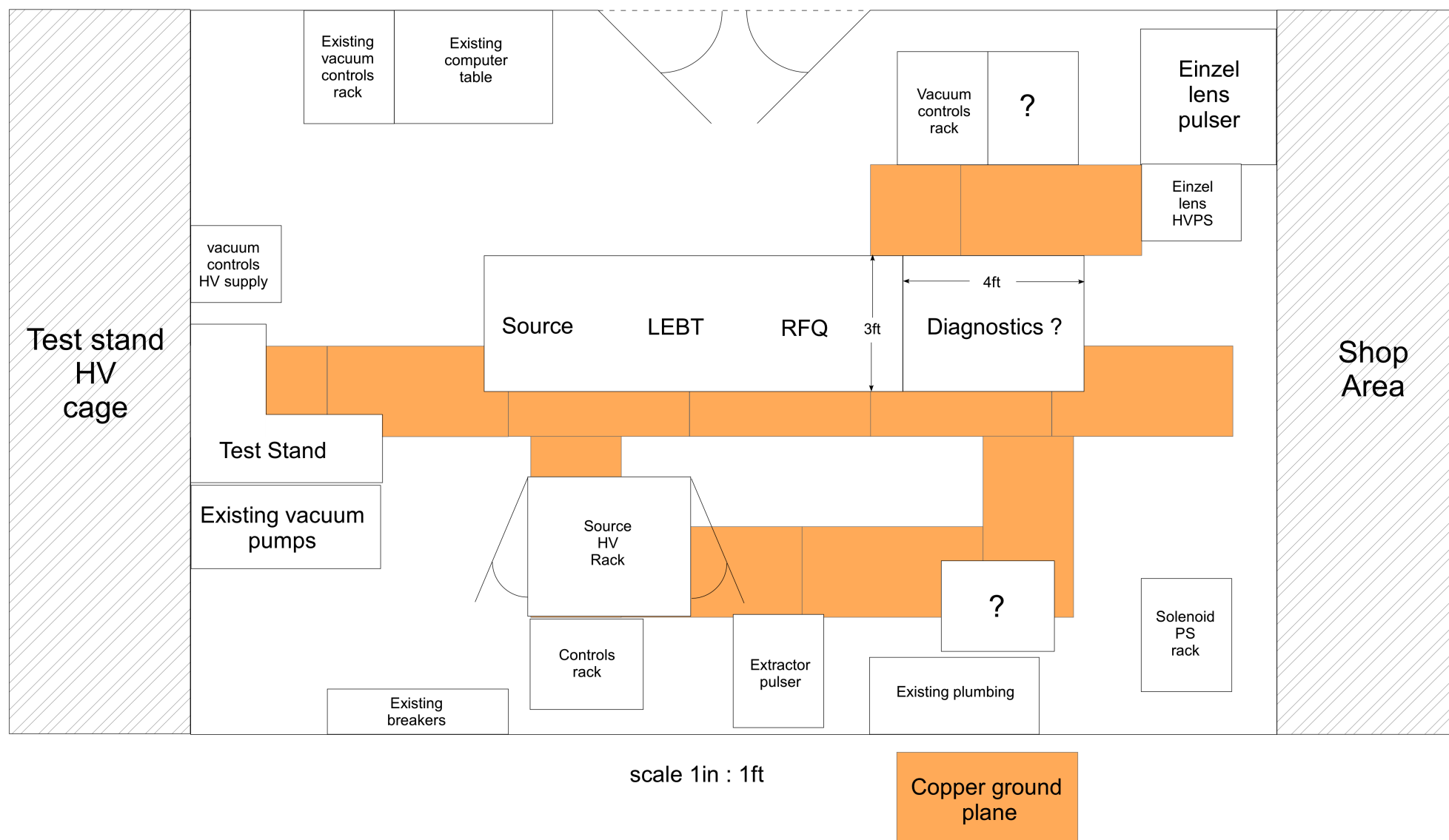
Device	Status	Comments
4816 PA	Water is hooked up. No leaks.	Expect power out of tube by 3 rd week of July.

MEBT Status



Device	Status	Comments
Quads	Coil winding has started (17 May)	All quad coils are complete (28 Jun). Dipole coils for 2 magnets complete. Potting has started. Cores will be delivered in Aug. 1 st magnet in Sent
Buncher	Bead pull parts are done. (29 Jun)	
Power for quads	Specs to follow	Quads being redone.
Power for buncher		Use present buncher supply in the line.

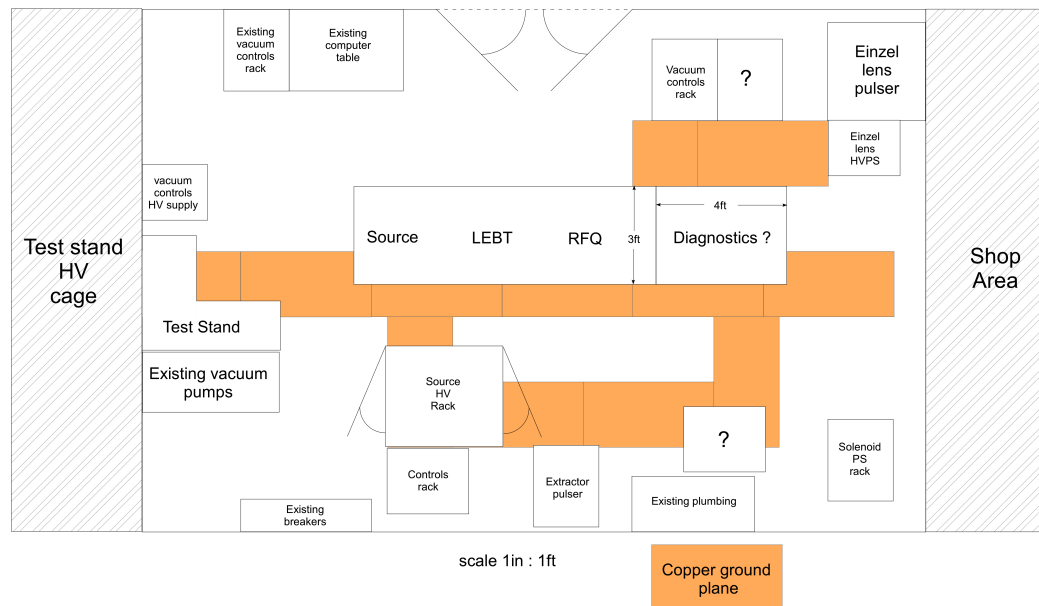
Proposed test area layout



Relay Racks

Rack	Owner	Space	Status
vacuum controls rack	Kent Triplett		On hand
Extractor pulser	Jim Lackey		
Extractor PS and controls	Jim Lackey		On hand
Einzel lens Pulser	Jim Lackey		????
Source HV	Jim Lackey		????
Trim PS	Steve Hays	2x3U	to be built
Solenoid PS	Steve Hays		????
Controls	Mike Kucera		????
Instrumentation	Ray Tomlin		????

Proposed test area layout

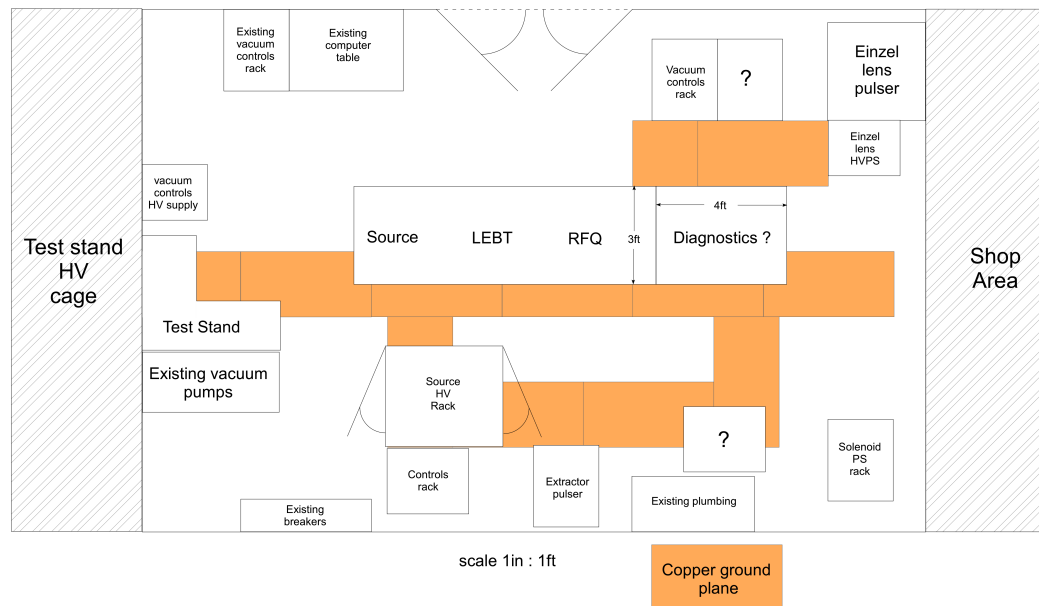


$1U = 1.75''$
 $2U = 3.5''$
 $3U = 5.25''$

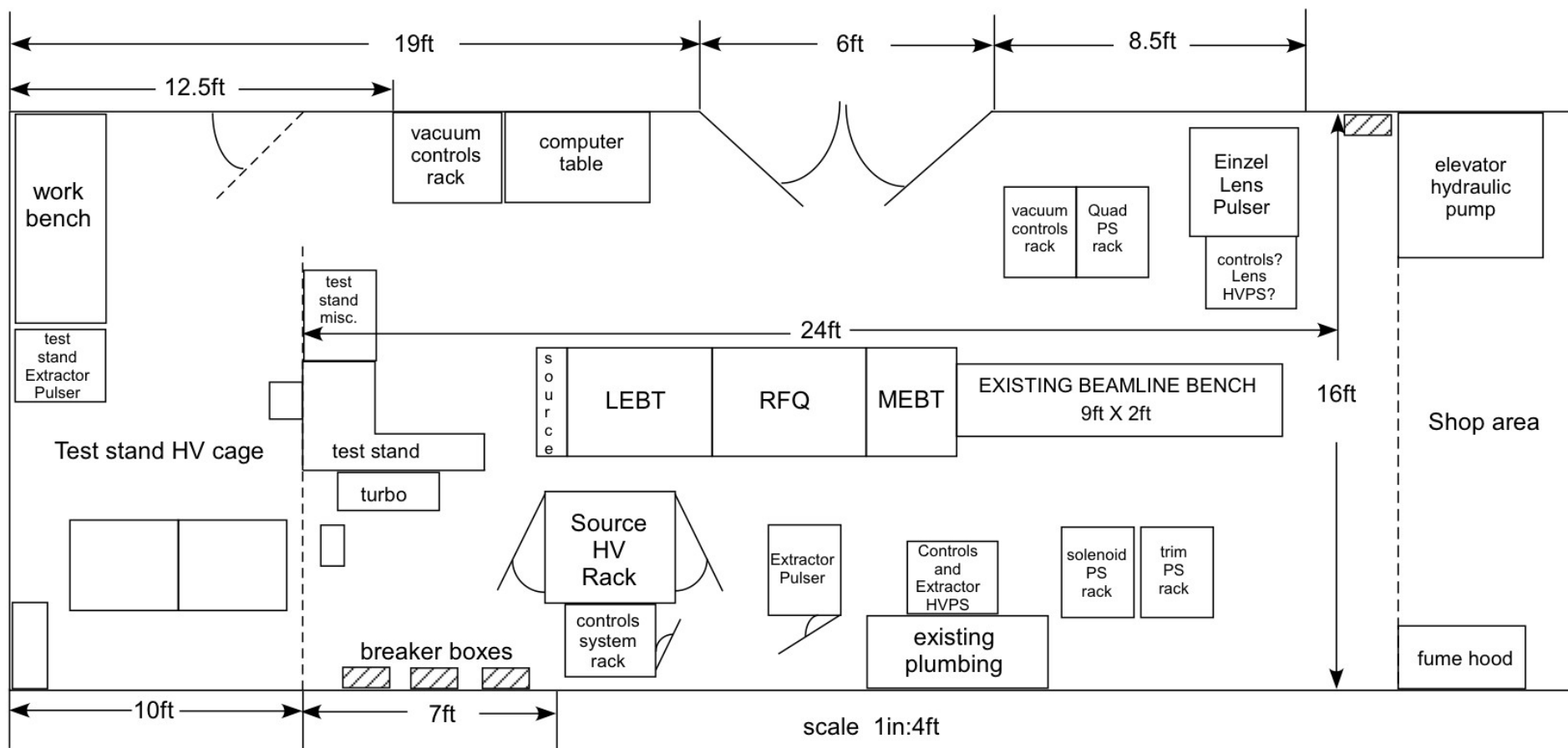
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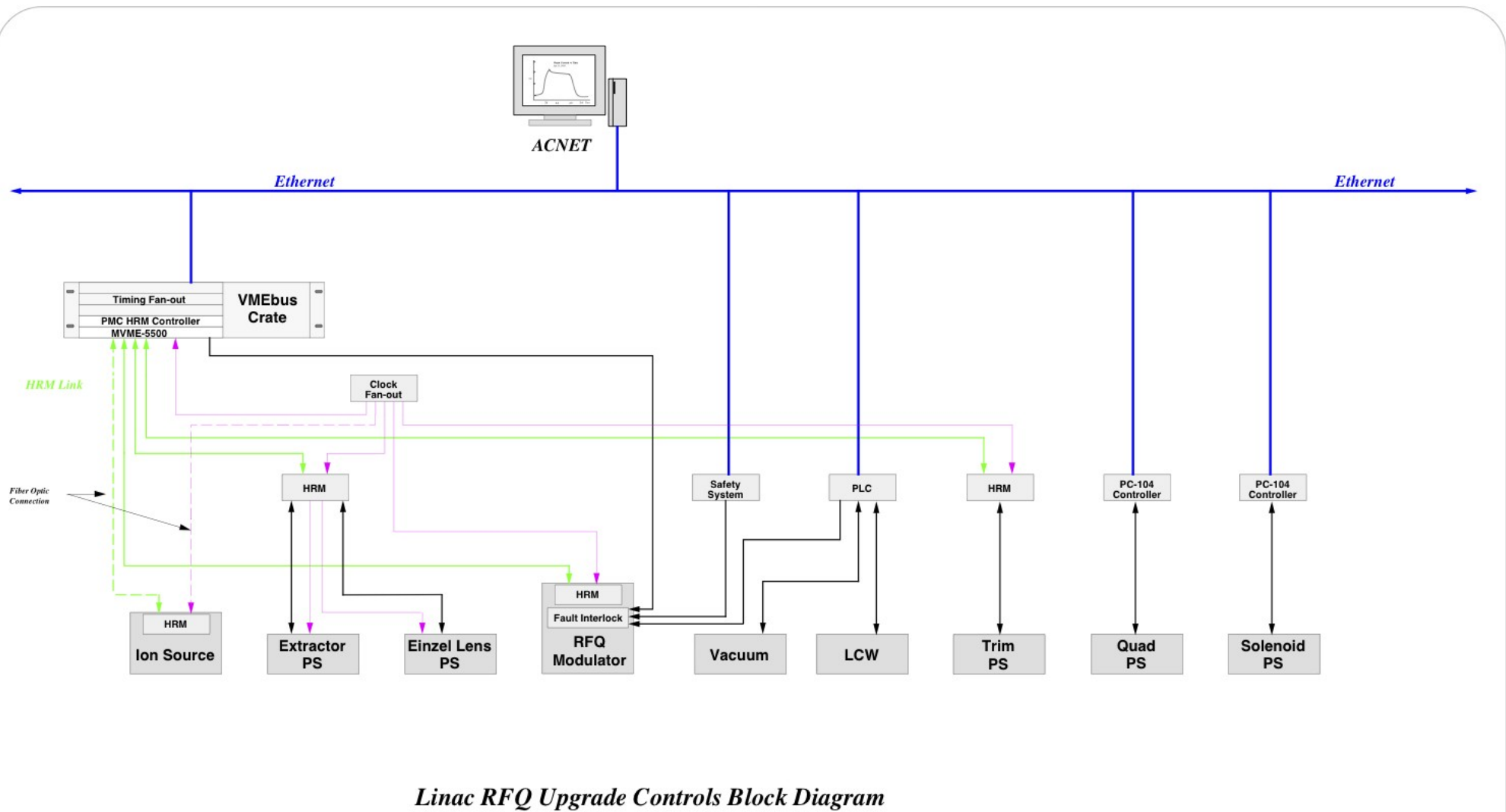
Old drawing



Test area, test stand and instrumentation

Device	Status	Comments
Floor	Copper flooring started. (06 Jun)	Done (06 July)
Toroid	Toroid to be installed in emittance probe can.	
Faraday Cup	On hand as dump	
Emittance probe can	4" bellows. 5" toroid.	Multiwires with dump should be ready end of July (29 Jun)
New source PS	started installation (06 July)	

Controls



Safety

- Beam parameters submitted to safety (Gary Lauten) 10 Jun.